



A word from the GSA

EGNOS safety and economic benefits for airspace users are acknowledged and operational implementation in Europe is progressing and expected to boost in the short term. For the GSA, it is a great satisfaction to confirm that the activities in place and strong link established with users are leading to concrete results for the EGNOS user community. Three years after the EGNOS Safety-of-Life service certification, 98 LPV approach procedures are operational in 71 airports in 9 countries. APV Baro-VNAV procedures to more than 70 additional runway ends are allowed to be flown using EGNOS vertical guidance in Germany and Czech Republic and additional countries are exploring this possibility.

The list of countries joining the group of EGNOS users is continually growing – a trend we expect to continue in 2014. For example, France has implemented a comprehensive plan to implement SBAS approach procedures throughout the country. Germany, Italy, Switzerland and UK also led pioneer initiatives paving the way to further adoption.

Recently also Spain, Finland, Austria and Czech Republic have implemented the first EGNOS based approaches within their plans. This is just the beginning; more countries are getting ready for publication in the short term

The collaboration with ESSP to support the EGNOS users within the next years will be key to achieve further success for EGNOS. By sharing a user oriented vision, we confirm our long term commitment to respond to the needs of aviation users in particular, and also to maritime, agriculture, road and rail users in order to build together a market success for EGNOS. In particular, the recently opened Horizon 2020 programme offers support to EGNOS related activities aiming at increasing adoption in all market domains and GSA is looking forward to receiving innovative proposals.



Gian-Gherardo Calini

Head of Market Development Unit

Status of the EGNOS implementation in Aviation EGNOS- based procedures already published in Europe (feb 14)

Country	Airports with LPV procedures	# LPV Procedures	Airports with APV baro Procedures	# APV baro Procedures
France	47	61	1	1
Switzerland	4	4	0	0
Guernsey	1	2	0	0
Germany	9	14	31	71
Italy	4	7	0	0
Spain	1	2	0	0
Finland	1	2	0	0
Austria	2	2	0	0
Czech Republic	2	4	1	4
Total	71	98	33	76

ESSP starts new ESP Contract with the GSA

As of January 1st 2014, ESSP started a new 8 year Contract with the GSA for the EGNOS Service Provision (ESP).

The Contract will secure the continuous and safe provision of the three EGNOS services –Open Service, Safety-of-Life and EDAS- and covers also maintenance and upgrading of the EGNOS system infrastructure.

This contract is one of the biggest contracts ever signed by the European Union in the frame of the EU GNSS Programs. The duration of the contract (ensuring a service provision period of 8 years) is a clear signal from the EU on its commitment to support the GNSS programs in general, and the EGNOS service provision in particular. Such a long term commitment is essential to provide the different user communities -such as Aviation, Maritime or Rail- with the visibility and stability that is required to invest in EGNOS user equipment and applications.

A Transition phase ensured ESSP's readiness for EGNOS Service provision in the frame of the GSA ESP2014-2021 Contract.

The Transition phase was conducted by means of several ESSP Internal Projects, Progress meetings with GSA and two major milestones between GSA & ESSP: SPRR (Service Provider Readiness Review) and SHOR (Service Hand Over Review). PRR & SHOR were managed through documents' data packages deliveries, reviewed by a team composed of GSA, ESA and EASA representatives.

This success is the result of a good collaboration inside ESSP's teams and between ESSP and GSA.



GSA, EC, EASA, ESA, ESSP and Telespazio team members at the ESP successful Kick- Off Meeting last July at Toulouse

ESSP appoints new Chief Executive Officer

At the same time, ESSP has announced the arrival of a new Chief Executive Officer: **Thierry Racaud** has taken over his new position beginning of February. Thierry was VP at Cap Gemini AeroSpace and Defence in Toulouse. He will bring to ESSP both experience and knowledge of the sector as well as a strong commercial background.

"Being passionate about aviation and space, I am very proud to be joining ESSP as Chief Executive, to lead the expansion of its business coverage while continuously excelling in the provision of EGNOS services" he explained.

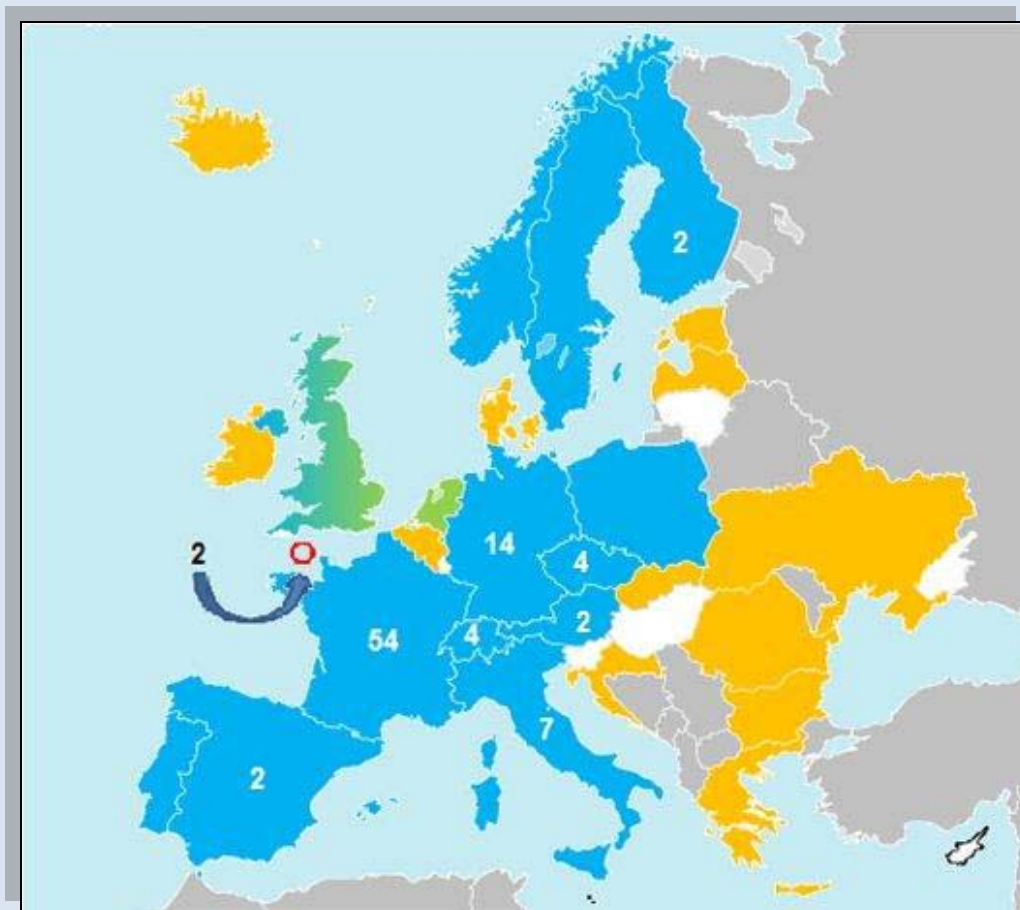


New EGNOS Agreements signed with Finavia, Avinor, LFV and London Southend Airport

Last weeks have been busy in terms of new EGNOS Working Agreement (EWA) signed between EESS and different European ANSPs: Finland's FINAVIA, Norway's AVINOR, Sweden's LFV and London Southend Airport have set the first step for EGNOS-based procedures implementation at their respective airports.

From now on, these four ANSP can start publishing LPV procedures that will bring real benefits to airspace users in terms of airports accessibility, delays reduction, diversions and cancellations reduction while improving safety.

Let's take a look at the actual map of EWAs on place:



	Initiated Discussions
	Advanced Discussions
	EWA signed
x	Number of published LPV procedures
	No feedback

Fist EGNOS approaches published in Czech Republic, Austria and Finland in 2014

Right after the latest EWA signatures with different European ANSPs, many new EGNOS-based procedures (LPV) have been published at European airports.

This is the case of Czech Republic, Austria and Finland.

In the Czech Republic, operators will benefit from LPV (Localizer Performance with Vertical Guidance) approaches in two runway ends at both **Brno** and **Ostrava** airports. The Czech Civil Aviation Authority has recently also approved the possibility for operators to use EGNOS vertical guidance with Baro-VNAV procedures, which means that four runway ends at **Vaclav Havel** Airport in Prague will benefit from EGNOS. Design of Baro and LPV procedures for Karlovy Vary Airport is also underway, leveraging the experience at the pioneer airports.

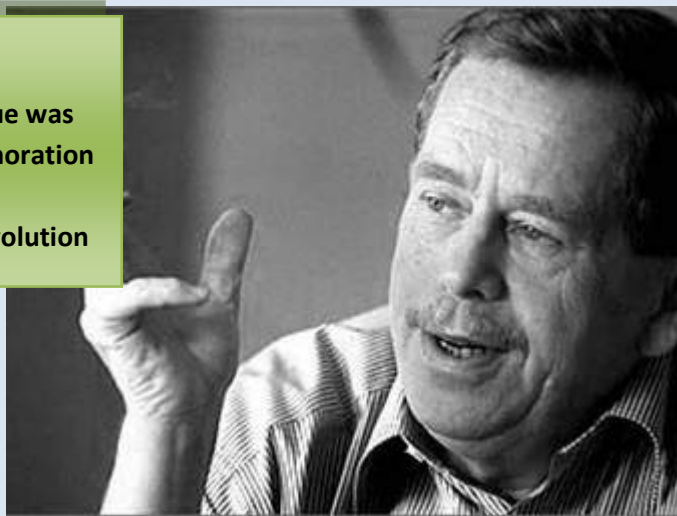
Austria has long been an enthusiastic supporter of EGNOS, and today LPV approach procedures are operational at **Linz** and **Graz** airports. “We are pleased to be an early user of the innovative potential of EGNOS,” says Andreas Schallgruber, Head of ATM Operations, AustroControl. “Providing satellite-based augmentation system procedures further augments our excellent service levels and customer relations.”

Finland’s **Joensuu** Airport published an LPV procedure in December 2013, being the Northern-most airport to benefit from EGNOS.

These pioneer implementation cases have been supported by the EU funded ACCEPTA project.

A little bit of History...

Vaclav Havel Airport in Prague was renamed in 2012 in commemoration of Czech Republic first Prime Minister after the Velvet Revolution



Upgrade of real-time information on the EGNOS User Support Website

The EGNOS User Support Website has been recently updated to monitor in quasi real time the EGNOS APV-I availability performances against the SDD defined Service Area. This information is computed by the User Performance Constant Monitoring (UPCM) tool designed by ESSP.

In case a degradation of the Service Area higher than a 20% is detected, a notification is sent to the users registered to the EGNOS User Support website advisory services. They could then access the website to check which area is actually degraded. When the situation is back to nominal conditions, another notification will be sent to inform users about this status change.

This new notification service complements the SIS outage notification service existing up to now.

Visit the [EGNOS User Support Website](#) to check EGNOS real time performance in addition to historical performance data!

EGNOS Multimodal Adoption Plan kicks offs

In order to improve users' perception on EGNOS services and promoting EGNOS adoption, ESSP has defined a robust methodology known as User Support Improvement Process combining coordinated action plans addressing users' satisfaction and EGNOS adoption. As part of the former process, the *ESSP EGNOS Multimodal Adoption (EMA) Action Plan* describes all those actions defined in support of GSA (including contacting, supporting and engaging stakeholders, preparation of technical and information documents, participation to events and workshops, creation of marketing and promotion material, etc) addressed to foster EGNOS adoption in different application domains.

The *ESSP EMA Action Plan 2014* has been defined on the basis of a set of ambitious adoption objectives and actions assigned by GSA to the EGNOS Service Provider. The former objectives and actions cover the following application domains: aviation, rail, maritime, surveying and agriculture.

All the actions described in the EMA Action Plan 2014 converge around a sole objective: to foster the use of EGNOS in the different domains across Europe.



Participation of ESSP in JASMIN and PROSBAS

In the framework of the support to European Commission (EC) and GSA in the area of standardization, ESSP has recently agreed with ESA and EC to participate in the FP7 projects **JASMIN** and **PROSBAS** as reviewers, providing key expertise in the areas of GNSS receivers, Mission evolution and Mission performance.

PROSBAS (Prototyping & Support to Standardization of SBAS L1/L5 Multiconstellation Receiver) aims to support the EC in the elaboration of the SBAS L1/L5 multi-constellation augmentation standard for the SIS ICD and User Receiver parts. JASMIN (Joint GNSS Aviation Standardization for a Multiple Constellation Integrated Receiver) is aimed at the development of Galileo stand-alone and combined Galileo/GPS/SBAS receiver standards, and ICAO SARPS for Galileo and SBAS L5.

This new support activity is fully in line with ESSP role as stakeholder in the European standardization process of future SBAS technology evolution towards

multi-frequency and multi-constellation, fostering the synergies with other relevant fore where ESSP provides its support, such as EUROCAE and SBAS Interoperability Working Group (IWG).



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EGNOS projects

Satellite navigation services for AFrican Region



The SAFIR team conducted the second Working Session in Addis Ababa from the 3rd to the 6th of December 2013.

This Session involved two sub-Working sessions, namely **Governance** and **Certification/Liability**. ESSP participated intensively in both Sessions providing technical and legal expertise.

It was also an opportunity to welcome the first EGNOS-Africa Joint Programme Office (JPO) management staff members who will be in charge of elaborating the GNSS/EGNOS services implementation roadmap prior to the deployment phase.

Next Working Session **“Aviation Applications and other Applications”** to be held in:

Cape Town – 27 - 28 February 2014

- Based on the experience gained in Europe, the objective of this session is to identify the main satellite applications targeted in Africa as well as for each of those applications the actions to be undertaken and the associated schedule.



First EGNOS test at Tunisian Airport

MEDUSA is the Euromed GNSS II project aimed at exploiting the E-GNSS in the Euromed area: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, and Tunisia.

In the frame of its activities, MEDUSA’s team led by Telespazio and composed by ENAV, OACA, INECO and Helios, have validated GNSS-based approach procedures for the airport of Monastir in Tunisia.

Only a few months after partial EGNOS coverage availability in North Africa, the validation flights campaign was carried out with the support of ESSP, which has performed the EGNOS’s feasibility assessment.

In parallel, MEDUSA is also aiding the Tunisian competent authorities in the future publication of the validated procedures and in the process for the operational adoption of GNSS in aviation.

The results of these assistance actions will be presented during a public workshop organized by MEDUSA and hosted by GEMCO (Galileo Euromed Cooperation Office) in Tunis on the 4th of June 2014.



The SHERPA final review meeting, last milestone of the project, was successfully held on the 13th November 2013 at GSA premises in Prague. This meeting is formally the technical closeout of the project which officially ended on 15th November 2013.

Representatives from all the partners of the consortium (ESSP, Pildo Labs, Polish Air Navigation Services Agency, Silesian University of Technology, Bulgarian Air Traffic Services Authority, General Directorate of State Airports Authority, Estonian Air Navigation Services and Hellenic Civil Aviation Authority) attended the meeting and participated actively by presenting its motivation to joint SHERPA, work performed, experience and lessons learnt, mapping of EGNOS within each PBN national strategy and future actions on EGNOS. The usefulness and added value of the project in terms of cooperation, network links and guidance received was positively emphasized by all the partners and GSA.

ESSP, the SHERPA Project coordinator, wants to thank the involvement, interest and effort dedicated by all the partners during the execution of the project.

IWG meeting in India

Airports Authority of India hosted the 26th Satellite Based Augmentation Systems (SBAS) Interoperability Working Group (IWG), in parallel to the 4th ICAO Ionospheric Study Task Force (ISTF) meeting. The event took place in New Delhi from 5th to 7th February and brought together SBAS providers from United States, Europe, India, Japan, Russia and South Korea. ESSP participation, on behalf of GSA, was focused on the presentation of EGNOS services uptake and multi-modal adoption plan in Europe.

The discussions and agreements reached during the meeting, especially regarding the definition of an interface document for future dual-frequency and multi-constellation SBAS, showed the good momentum for SBAS as a key technology in the next years. The group also congratulated GAGAN, which has eventually obtained its safety certification for RNP 0.1 operation within FIR India.



IWG and ICAO representatives in New Delhi

Upcoming Events



World ATM Congress 2014

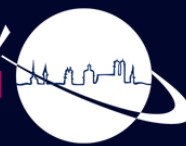
Operated by CANSO in association with ATCA

Madrid, 4-6 March

- ✓ the largest global platform for air traffic management (ATM) stakeholders
- ✓ 200 exhibitors + 50000 expected visitors

EGNOS stand and
EGNOS Workshop on
Tuesday March 4th
[Register now!](#)

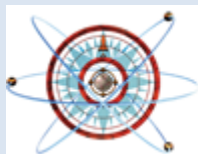
MUNICH SATELLITE NAVIGATION SUMMIT 2014



9-12 April

- 600 exhibitors
- E- flight expo, civilian drones and Avionics Avenue

EGNOS stand



ENC-GNSS 2014

Technology - Innovation - Business



Rotterdam, 15-17 April

ESSP presenting 4 Papers in ENC

- EDAS EGNOS DATA OVER THE INTERNET
- THE IMPACT OF THE HIGH IONOSPHERIC ACTIVITY IN THE EGNOS PERFORMANCE
- EGNOS PERFORMANCE MONITORING ACTIVITIES PERFORMED BY THE ESSP
- H24 REACTIVE EGNOS NOTAM PROPOSALS ORIGINATION REALITY

More info on



essp-sas.eu

EGNOS Service Provider Website. Info on the EGNOS system, news on the service. Status on EGNOS implementation in Aviation. Projects. Events. Others.

egnos-user-support.essp-sas.eu

Information on past and current EGNOS performances. Signal in Space (SIS) status. Forecast on SIS availability. EDAS information and registration.

egnos-portal.gsa.europa.eu

EGNOS applications. Developers platform. Business support.

For questions & Information
EGNOS HELPDESK

+ 34 911 236 555

egnos-helpdesk@essp-sas.eu



Disclaimer: EGNOS is a complex technical system and the users have certain obligations to exercise due care in using the EGNOS services. Before any use of the EGNOS services, all users should review the EGNOS SoL Service Definition Document ("SDD") and/or EGNOS Open Service SDD (both available on the EESSP SAS website <http://www.essp-sas.eu/>) in order to understand if and how they can use these EGNOS services, as well as to familiarise themselves with their respective performance level and other aspects the services may offer. Use of an EGNOS service implies acceptance of its corresponding SDD specific terms and conditions of use, including liability.

In case of doubt the users and other parties should contact the EESSP SAS helpdesk at egnos-helpdesk@essp-sas.eu. Aviation Users may also contact their National Supervisory Authority.

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